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CONFIRMATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. APPLICATION NO. 10/069,574 08/01/2002 Gerard Ribes 1721-49 1529 EXAMINER 21559 7590 04/19/2006 **CLARK & ELBING LLP** WEDDINGTON, KEVIN E 101 FEDERAL STREET ART UNIT PAPER NUMBER BOSTON, MA 02110 1614

DATE MAILED: 04/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/069,574	RIBES ET AL.
	Examiner	Art Unit
	Kevin E. Weddington	1614
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).		
Status		
1) ☐ Responsive to communication(s) filed on 11 Ja 2a) ☐ This action is FINAL. 2b) ☐ This 3) ☐ Since this application is in condition for allowar closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro	
Disposition of Claims		
4) ☐ Claim(s) 1-3,5-10 and 12-23 is/are pending in the day of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-3, 5-10 and 12-23 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or are subjected to by the Examine 10) ☐ The drawing(s) filed on is/are: a) ☐ acceptable above the day is/are pending in the day is/ar	vn from consideration. r election requirement. r. epted or b)□ objected to by the B	
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.		
Priority under 35 U.S.C. § 119		
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>		
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal F 6) Other:	

Application/Control Number: 10/069,574

Art Unit: 1614

Claims 1-3, 5-10 and 12-23 are presented for examination.

Applicants' response filed January 11, 2006 has been received and entered.

Accordingly, the rejection made under 35 USC 102(b) a set forth in the previous Office action dated November 7, 2005 at pages 2-3 is hereby withdrawn since the prior art, Sauvaire et al., Diabetes, 1998, Vol. 47, No. 2, pp. 206-210; did not teach the 4-hydroxyisoleucine as an insulin sensitizer or insulin mimetic. The rejection made under 35 USC 103 as set forth in the previous Office action dated November 7, 2005 at page 3-5 is hereby withdrawn since the Sauvaire et al. reference does not teach the 4-hydroxyisoleucine as an insulin sensitizer or insulin mimetic and is combined with insulin (applicants' specification does show working examples for the instant combination).

## Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-3, 5-10 and 12-23 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for treating Type II diabetes, does not reasonably provide enablement for treating a patient that has or is at risk of developing one or more syndromes associated with insulin resistance; developing insulin resistance; developing hyperinsulinemia; developing insulin associated with ageing; developing one or more of the illness associated with obesity; and developing Type I diabetes. The specification does not enable any person skilled in the art to

Application/Control Number: 10/069,574

Art Unit: 1614

which it pertains, or with which it is most nearly connected, to make and/or use the invention commensurate in scope with these claims.

In this regard, the application disclosure and claims have been compared per factors indicated in the decision <u>In re Wands</u>, 8 USPQ2d 1400 (Fed. Cir., 1988) as to undue experimentation.

The factors include:

- 1) the quantity of experimentation necessary
- 2) the amount of direction or guidance provided
- 3) the presence or absence of working examples
- 4) the nature of the invention
- 5) the state of the art
- 6) the relative skill of those in the art
- 7) the predictability of the art and
- 8) the breadth of the claims

The instant specification fails to provide guidance that would allow the skilled artisan background sufficient to practice that instant invention without resorting to undue experimentation in view of further discussion below.

The nature of the invention, state of the prior art, relative skill of those in the art and the predictability of the art

The claimed invention relates to a method of inducing an insulin sensitizing or insulin mimetic effect in a tissue of a patient, the method comprising administering to the patient 4-hydroxyisoleucine and/or the lactonic form thereof.

Application/Control Number: 10/069,574

Art Unit: 1614

The relative skill of those in the art is generally that of a Ph.D. or M.D.

The present invention is unpredictable unless experimentation is shown for the administration of 4-hydroxyisoleucine to treat a patient that has or is at risk of developing one or more syndromes associated with insulin resistance; developing insulin resistance; developing hyperinsulinemia; developing insulin associated with ageing; developing one or more of the illness associated with obesity; and developing Type I diabetes.

The amount of direction or guidance provided and the presence or absence of working examples

The working examples are limited to the administration of 4-hydroxyisoleucine to treat Type II diabetes.

Working examples show the combination of 4-hydroxyisoleucine combine with insulin.

No working examples showing the administration of 4-hydroxyisoleucine will treat a patient that has or is at risk of developing one or more syndromes associated with insulin resistance; developing insulin resistance; developing hyperinsulinemia; developing insulin associated with ageing; developing one or more of the illness associated with obesity; and developing Type I diabetes.

## The quantity of experimentation necessary

Applicants have failed to provide guidance as to how the administration of 4-hydroxyisoleucine will treat a patient that has or is at risk of developing one or more syndromes associated with insulin resistance; developing insulin resistance;

Application/Control Number: 10/069,574 Page 5

Art Unit: 1614

developing hyperinsulinemia; developing insulin associated with ageing; developing one or more of the illness associated with obesity; and developing Type I diabetes.

Therefore, undue experimentation would be required to practice the invention as it is claimed in its current scope.

Claims 1-3, 5-10 and 12-23 are not allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin E. Weddington whose telephone number is (571)272-0587. The examiner can normally be reached on 11:00 am-7:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Low can be reached on (571)272-0951. The fax phone number for the organization-where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kevin E. Weddington Primary Examiner Art Unit 1614